

## (12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property  
Organization  
International Bureau



(43) International Publication Date  
6 May 2004 (06.05.2004)

PCT

(10) International Publication Number  
**WO 2004/037796 A2**

(51) International Patent Classification<sup>7</sup>: **C07D 241/00**

(CH). SCHLAPBACH, Achim [DE/DE]; Hünerbergweg 8, 79539 Lörrach (DE). WÄLCHLI, Rudolf [CH/CH]; St. Johannis-Vorstadt 90, CH-4056 Basel (CH).

(21) International Application Number:  
PCT/EP2003/011848

(22) International Filing Date: 24 October 2003 (24.10.2003)

(74) Agent: GRUBB, Phillip; Novartis AG, Corporate Intellectual Property, CH-4002 Basel (CH).

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:  
0224917.5 25 October 2002 (25.10.2002) GB

(81) Designated States (*national*): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LT, LU, LV, MA, MD, MK, MN, MX, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SE, SG, SK, SY, TJ, TM, TN, TR, TT, UA, US, UZ, VC, VN, YU, ZA, ZW.

(71) Applicant (*for all designated States except AT, US*): NOVARTIS AG [CH/CH]; Lichtstrasse 35, CH-4056 Basel (CH).

(84) Designated States (*regional*): Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR).

(71) Applicant (*for AT only*): NOVARTIS PHARMA GMBH [AT/AT]; Brunner Strasse 59, A-1230 Vienna (AT).

(72) Inventors; and

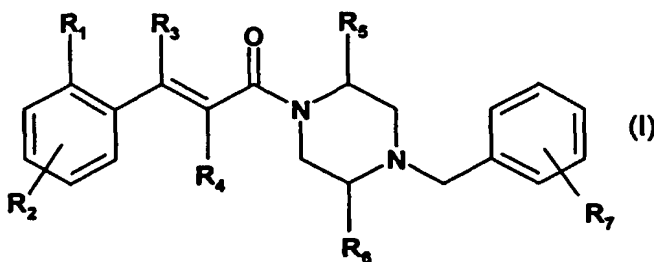
Published:

(75) Inventors/Applicants (*for US only*): BOLLBUCK, Birgit [DE/DE]; Bodenseestrasse 23, 79576 Weil am Rhein (DE). EDER, Jörg [DE/DE]; Zwischen den Bächen 4, 79618 Rheinfelden (DE). HENG, Richard [FR/FR]; 19, passage de la Colline, F-68220 Hégenheim (FR). RÉVÉSZ, László [CH/CH]; Ob dem Fichtenrain 7, CH-4106 Therwil

— without international search report and to be republished upon receipt of that report

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

(54) Title: 1-(4-BENZYL-PIPERAZIN-1-YL)-3-PHENYL-PROPENONE DERIVATIVES



(57) Abstract: A compound of formula (I), or a pharmaceutically acceptable salt or ester thereof, wherein the symbols have meaning as defined, which are antagonists of CCR-1 and which find use pharmaceutically for treatment of diseases and conditions in which CCR-1 is implicated, e.g. inflammatory diseases.